

Atty. Docket No. YOR920030411US1
(590.116)

REMARKS

In the Office Action dated May 24, 2007, pending Claims 1-19 were rejected.

Claims 1, 10 and 19 are independent claims; the remaining claims are independent.

Applicants have filed herewith an Amendment. The Office is respectfully requested to reconsider the rejections presented in the outstanding Office Action in light of the foregoing amendments and the following remarks.

Applicants have added new dependent claim 20, which is directed to an additional feature of the present invention, and amended claims 1, 9, 10, 18, and 19 in this application. Applicants are not conceding in this application that those claims are not patentable over the art cited by the Examiner, as the present claim amendments are only for facilitating expeditious prosecution of the instant application. Applicants respectfully reserve the right to pursue these and other claims in one or more continuations and/or divisional patent applications.

Rejections under 35 U.S.C. § 103(a)

Claims 1-19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Anerousis et al. (U.S. Patent Publication No. 2004/0210670) (hereinafter "Anerousis") in view of Klinker et al. (U.S. Patent No. 7,133,365) (hereinafter "Klinker"). Applicants respectfully request reconsideration and withdrawal of these rejections.

As the Examiner is no doubt aware, a 35 U.S.C. §103(a) rejection requires that the combined cited references provide both the motivation to combine the references and an

Atty. Docket No. YOR920030411US1
(590.116)

expectation of success. Not only is there no motivation to combine the references, no expectation of success, but actually combining the references would not produce the claimed invention. Thus, the claimed invention is patentable over the combined references and the state of the art.

To briefly summarize, the instantly claimed invention is a decentralized or distributed approach to routing (choosing the best ISP). *Specification*, page 6, lines 10-11. Rather than utilize route control products that interact with the edge routers by updating tables (as in Klinker, discussed below), the instantly claimed invention accomplishes first hop route selection utilizing, e.g., MPLS at the general purpose computers, extending the choice back to the applications themselves. Thus, *the best first hop to an ISP is selected at a general purpose computer based on various criteria by utilizing a label (e.g. MPLS label) for the routing control and implementation step*. This takes place *at a general purpose computer from which the packets of information originate*, rather than via the traditional modification of tables by an outside device (i.e., routing at an intermediate or separate device which does not generate the information). *Specification*, page 7, line 8-page 8, line 15. The label chosen by the general purpose computer (e.g. a user's work station or an end-user computer) allows the routing decision made at the general purpose computer to enable forwarding of the network traffic (packets) to the best ISPs via MPLS labels (*Specification*, page 6, line 10-page 7, line 11) or VLAN identifiers (*Specification*, page 8, line 16-page 9, line 8) or IP level tunnels (*Specification*, page 9, lines 9-16).

Atty. Docket No. YOR920030411US1
(590.116)

The instant invention is not obvious in view of Anerousis, either alone or in combination with Klinker. Although the performance and availability metrics employed by the instantly claimed invention may to some extent be found in prior art, the method of employing these metrics is quite different than any of the cited art or the state of the art. Moreover, the way in which some of the measurements are utilized is not taught either in the art of record or in the state of the art. It is the combination of the measurements being done at the user's computer, running the application that will need to utilize the link best suited for it, and making the routing decision at the user's computer that distinguishes the instant invention from the state of the art and the art of record.

As best understood, Anerousis is directed to methods of modifying networks to perform proper end to end routing by selecting the best servers (i.e., it is directed to server selection), not employing general purpose computers (e.g. a user's work station) to select the best first hop to an ISP. *Anerousis*, Abstract; Figure 1 and accompanying text. In Anerousis, the network itself contains intelligence to redirect, within the network itself, requests to the best performing replica server. *Anerousis* at [0016] (stating "embodiments of the invention *enable the network itself* to be aware of the services existing at its edges and to route connection requests for these services to the appropriate servers") (emphasis added). Thus, there is a two step server selection employed in Anerousis, first choosing which server cluster site is best, and second having an edge router choose the best server to direct the request. Properly characterized, Anerousis does not teach selection of the best ISP but rather server selection. *Id.* Moreover, Anerousis does not contemplate the end user or general purpose computer utilizing MPLS to select the proper first hop ISP.

Atty. Docket No. YOR920030411US1
(590.116)

The teachings of Anerousis stand in stark contrast with the instantly claimed invention. Solely in an effort to facilitate expeditious prosecution, Applicants have amended claim 1 to recite, *inter alia*,

establishing a connection between said general purpose computer and an arrangement for linking said computer to multiple internet service providers (ISPs); measuring relevant performance and availability metrics of said links *at said general purpose computer*; and *making a routing control decision at said general purpose computer prior to sending a packet comprising network traffic; wherein said general purpose computer makes the routing control decision to direct the packet to a best link based upon said relevant performance and availability metrics.*

Claim 1 (emphasis added). The remaining independent claims have been rewritten to incorporate similar language. This language is intended to clarify that rather than utilizing separate routing control products that interact with the edge routers, it is the general purpose computer the makes the routing control decision, based on relevant metrics as measured at the general purpose computer, that determines to which link a packet will go. Applicants respectfully submit that the instantly claimed invention is clearly distinguishable from the art of record and the state of the art. Applicants therefore respectfully request reconsideration and withdrawal of the rejection under 35 U.S.C. § 103(a).

Applicants have also added new dependent claim 20, which is directed to an additional feature of the present invention. Claim 20 now recites, *inter alia*, "a label is utilized to direct the packet to a best link".

Applicants have also amended dependent claims 9 and 18 to claim more explicitly an embodiment of the invention as described on page 7, line 12-page 8, line 15 of the

Atty. Docket No. YOR920030411US1
(590.116)

original *Specification*. Claims 9 now recites, *inter alia*, "wherein the step of measuring relevant performance and availability metrics comprises making passive measurements, wherein the general purpose computer utilizes applications running on the general purpose computer to measure the relevant performance metrics in an application-specific manner." Claim 9. Claim 18 contains similar language. This language is intended to indicate that by allowing the general purpose computer, running the applications, to route the information originating from the general purpose computer, flexibility is added in that the measurement of the relevant performance metrics can be accomplished in an application-specific manner. Applicants respectfully submit that neither Anerousis nor Klinker, nor anything in the state of the art teach or suggest the invention as recited in dependent claims 9 and 18.

In light of the deficiencies and inapplicability of Anerousis to the instantly claimed invention, Applicants will only briefly address the Klinker reference cited by the Examiner. Applicants respectfully reserve the right to elaborate on the Klinker reference should the need to do so arise, and in no way should this abbreviated treatment indicate that the Applicants agree with the Examiner's interpretation of the art of record.

Klinker does not account for the deficiencies of Anerousis discussed above. As best understood, although Klinker does teach route selection (i.e. choosing ISP paths), Klinker teaches a more traditional method implemented by a centralized device interacting with the edge routers (updating tables) to choose the best ISP; this centralized device implements the routing scheme rather than at the end-points (e.g. a general purpose or an end-user computer). *Klinker*, Figure 10 and accompanying text. The

10-24-'07 17:58 FROM-

**RECEIVED
CENTRAL FAX CENTER**

412-741-9292

T-186 P018/019 F-080

OCT 24 2007

Atty. Docket No. YOR920030411US1
(590,116)

instantly claimed invention “removes the need for a dedicated route control device and instead permits general purpose computers to perform route control functions themselves.” *Specification*, page 6, lines 10-11. Thus, rather than the “Central PFA” of Klinker, the instantly claimed invention allows general purpose computers to control the routing to the ISP by employing MPLS, thus allowing a more distributed approach to route selection. *Klinker*, Figure 10. Naturally Klinker is concerned with similar metrics for routing, but the method employed for choosing the route is very different. Therefore, Applicants respectfully request reconsideration and withdrawal of the rejections under 35 U.S.C. § 103(a).

Conclusion

In view of the foregoing, it is respectfully submitted that Independent Claims 1, 10 and 19 fully distinguish over the applied art and are thus allowable. By virtue of dependence from Claims 1 and 10, it is thus also submitted that Claims 2-9 and 11-18 are also allowable at this juncture.

- 12 -

10-24-07 17:58 FROM-

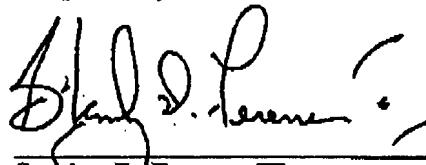
412-741-9292

T-186 P019/019 F-080

Atty. Docket No. YOR920030411US1
(590.116)

In summary, it is respectfully submitted that the instant application, including Claims 1-19, is presently in condition for allowance. Notice to the effect is hereby earnestly solicited. If there are any further issues in this application, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,



Stanley D. Ference III
Registration No. 33,879

Customer No. 47049
FERENCE & ASSOCIATES LLC
409 Broad Street
Pittsburgh, Pennsylvania 15143
(412) 741-8400
(412) 741-9292 - Facsimile

Attorneys for Applicants